SECTION III: FSA/FACTA/FAIRA

Clients who operate highly erodible cropland (HEL) fields as defined by the Food Security Act of 1985 (FSA); and as amended by the Food, Agriculture, Conservation, and Trade Act of 1990 (FACTA); and the Federal Agriculture Improvement and Reform Act of 1996 (FAIRA) are required to apply and maintain a conservation system that meets requirements of this section of the FOTG to maintain eligibility for USDA program participation. Clients may choose to meet the minimum requirements of FSA and develop a plan for a Basic Conservation System or an Alternative Conservation System.

Clients should be encouraged to develop a Resource Management System (RMS). However, the minimum requirement to maintain eligibility for USDA program participation is to treat the soil erosion resource concern to the Basic Conservation System (BCS) or Alternative Conservation System (ACS) level.

BASIC CONSERVATION SYSTEMS

A Basic Conservation System (BCS) is an erosion control conservation subsystem of a RMS for highly erodible land, which achieves soil loss tolerance requirements for the principle soil it is designed to protect. In addition, a BCS shall treat concentrated flow erosion within the cropland field and classic gullies adjacent to the field that will impact the applied conservation system. This system applies only to conservation plans and conservation systems developed to carry out the provisions of the current legislated farm programs. A Basic Conservation System that meets the requirements of FSA will differ from a Resource Management System in that it deals only with the soil erosion concern on highly erodible cropland.

In developing a Basic Conservation System, soil erosion including sheet and rill, ephemeral gully and wind erosion shall be controlled to meet quality criteria. Classic gully erosion shall be controlled when it can be expected that further advancement of that gully will impact the applied conservation system. Control of irrigation induced erosion is not required.

During the process of developing a Basic Conservation System, attention will be given to providing the client with sound alternatives. The alternatives should give clients a chance to consider the most cost effective treatment that meets their objectives and also provides for compliance with legislated programs. The client will be encouraged to develop a Resource Management System.

All highly erodible land sodbusted from native vegetation shall meet the BCS or tolerable soil loss ("T") level for the predominant soil(s) used in planning the sodbusted field.

ALTERNATIVE CONSERVATION SYSTEMS

An Alternative Conservation System (ACS) is an erosion control conservation subsystem for highly erodible land, which achieves only a substantial reduction in soil loss rates compared to those predicted under non-treatment conditions. This applies only to conservation plans and conservation systems developed to carry out the provisions of the current legislated farm programs. An Alternative Conservation System that meets the requirements of FSA will differ from a Basic Conservation System in that it makes only a "Substantial Reduction in Soil Erosion" from that predicted under a non-treatment condition. The 1996 Farm Bill Legislation defines a "Substantial Reduction in Erosion" as a 75%

reduction of potential erosion not to exceed 2 times the tolerable soil loss limit for the planning soil map unit in each HEL field. This definition is based on the use of RUSLE technology.

In developing an Alternative Conservation System, the specific form of erosion, which resulted in the field being declared highly erodible, must be treated.

Fields determined to be highly erodible from sheet and rill erosion shall also have wind erosion treated to a level not to exceed the water erosion level.

Fields determined to be highly erodible from wind erosion shall also have sheet and rill erosion treated to a level not to exceed the wind erosion level.

Fields determined to be highly erodible from both water and wind erosion will have required treatment to the level for both water and wind erosion Alternative Conservation Systems.

Ephemeral gully erosion will be treated to the Quality Criteria of a RMS under all Alternative Conservation Systems. Classic gully erosion shall be treated when further advancement of the gully will impact other applied conservation practices.

During the process of developing an Alternative Conservation System, attention will be given to providing the client with sound alternatives. The alternatives should give clients a chance to consider the most cost effective treatment that meets their objectives and also provides for compliance with FSA. The client will be encouraged to develop a Resource Management System.

Example BCS and ACS systems commonly used in the local field office are maintained in Section III of the FOTG.

A. WATER EROSION ALTERNATIVE CONSERVATION SYSTEM (ACS)

Clients who obtained an approved conservation compliance plan prior to July 3, 1996 may;

1) Continue to use the existing conservation system described in that plan provided the conservation system met the criteria of a USLE "CP" equal to or less than 0.12 for HEL fields with soils assigned System A and 0.19 for all other soils.

2) The same client may revise their plan to achieve an equal level of soil erosion based on their original plan or they may revise their plan not to exceed a "Substantial Reduction in Erosion".

3) New operators can accept existing plans if they continue to apply the original conservation system. New operators who do not accept existing plans must develop a plan, which achieves a "Substantial Reduction in Erosion".

*** AN EXAMPLE ACS for plans developed prior to July 3, 1996 on system A soils (CP < 0.12)**

1. Plant a high residue crop at least ½ of the crop rotation; and

2. Use conservation tillage practices that leave at least 50% surface residue cover after planting following high residue crops; and 30% surface residue cover after planting following low residue crops; and

3. Use contour farming.

4. Control ephemeral gully erosion with grass waterways and/or water and sediment control basins.

NOTE THAT ANY COMBINATION OF PRACTICES THAT ACHIEVES A CP $\leq$ 0.12 WAS AN EQUIVALENT ALTERNATIVE SYSTEM A.

*** AN EXAMPLE ACS for plans developed prior to July 3, 1996 on system B soils (CP < 0.19)**

1. Plant a high residue crop at least ½ of the crop rotation; and

2. Use conservation tillage practice that leave at least 30% surface residue cover after planting; and

3. Use contour farming.

4. Control ephemeral gully erosion with grass waterways and/or water and sediment control basins.

NOTE THAT ANY COMBINATION OF PRACTICES THAT ACHIEVES A (CP $\leq$ 0.19) WAS AN EQUIVALENT ALTERNATIVE SYSTEM B.

Clients who obtain a conservation compliance plan after July 3, 1996 and new operators who revise conservation plans developed prior to this date shall meet the criteria outlined below for sheet and rill erosion, and ephemeral gully control.

1) The maximum allowable soil loss from sheet and rill erosion is that which achieves a "Substantial Reduction in Erosion". A "Substantial Reduction in Erosion" is defined as a 75% reduction of potential erosion not to exceed two times the tolerable soil loss limit for the highly erodible soil used to develop the conservation plan. This criteria is based on application of Revised Universal Soil Loss Equation (RUSLE) Technology.

In no case will clients eligible to apply an ACS level conservation system for sheet and rill erosion be required to reduce predicted soil loss to less than that defined as being a "Substantial Reduction in Erosion".

B. WIND EROSION ALTERNATIVE CONSERVATION SYSTEM

Clients who obtained an approved conservation compliance plan prior to July 3, 1996 had permissible ACS soil erosion levels based on the Wind Erosion Equation (WEQ) wind erodibility groupings. These clients may;

1. Continue to use the existing conservation system described in that plan provided the conservation system met the following criteria;

FOR SOILS IN WIND ERODIBILITY GROUP 1

a. Maintain 1250 pounds of Flat Small Grain Equivalent residue cover during the spring critical erosion period for all annually seeded crops in the rotation; and

a. Establish a stable condition to isolate fields at 1000 foot intervals or less.

FOR SOILS IN WIND ERODIBILITY GROUP 2 (AND GREATER)

a. Maintain 1250 pounds of Flat Small Grain Equivalent residue cover during the spring critical erosion period for ¾ of the crops in the rotation; and

b. Establish a stable condition to isolate fields at 1000 foot intervals or less.

NOTE - FOR SOIL MAP UNITS WITH A "T" VALUE OF 3 OR LESS, THE ACS COMPUTED SOIL LOSSES SHALL BE THE LESSER OF APPLICATION OF THE SYSTEMS LISTED ABOVE (OR THEIR EQUIVALENT) NOT TO EXCEED A LEVEL OF 4 TIMES "T".

These criteria were established using the Wind Erosion Equation "Critical Period" method of determining wind erosion. ACS's may also be designed using the "Crop Management Period" method.

2) The same client may revise their plan to achieve an equal level of soil erosion based on their original plan or they may revise their plan not to exceed a "Substantial Reduction in Erosion".

3) New operators can accept existing plans if they continue to apply the original conservation system. New operators who do not accept existing plans must develop a plan, which achieves a "Substantial Reduction in Erosion".

Clients who obtain a conservation compliance plan after July 3, 1996 and new operators who revise conservation plans developed prior to this date shall meet the criteria outlined below for wind erosion, and ephemeral gully control.

1) The maximum allowable soil loss from wind erosion is that which achieves a "Substantial Reduction in Erosion". A "Substantial

Reduction in Erosion" is defined as a 75% reduction of potential erosion not to exceed two times the tolerable soil loss limit for the highly erodible soil used to develop the conservation plan.

In no case will clients eligible to apply an ACS level conservation system for wind erosion be required to reduce predicted soil loss to less than that defined as being a "Substantial Reduction in Erosion".

Clients may request ACS plans, which exceed the provisions listed above. NRCS District Conservationists may only approve plans, which meet these provisions. Plan approval to exceed these provisions will be based on recommendations of the NRCS State Conservationist, for erosion levels less than 4 times "T" or the Director of CEAD for soil loss levels above 4 times "T".